



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,850	01/22/2002	Keith J. Gerard	UW001	5029

7590 03/08/2006

Keith J. Gerard
3721 W. 67th Place
Chicago, IL 60629

EXAMINER

JOSEPH, JAISON

ART UNIT	PAPER NUMBER
----------	--------------

2634

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/053,850	Applicant(s) GERARD, KEITH J.	
	Examiner Jaison Joseph	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 6 is objected to because of the following informalities: Claim 6, line 2 recite "at least on CPE" should have been "at least one CPE". Appropriate correction is required.

Allowable Subject Matter

The indicated allowability of claims 6 – 10 are withdrawn in view of the newly discovered reference(s) to Walton et al (US Patent 6,751,187) and Examiner had overlooked the reference Wright et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4, 6 and 11 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (US Patent 6,108,523) in view of Amin et al. (US Patent 6,714,987).

Regarding claim 1, Wright et al. discloses a data access system having a transmission cell receiving communication data, spread spectrum encoding the data, transmitting said spread spectrum encoded data, the aircraft premises equipment receiving and decoding said spread spectrum data (see column 2, lines 33 – 43), and determining the signal to noise ratio of received data (column 4, lines 45 – 60), wherein the transmission cell is portioned into sectors and wherein the frequency of operation of at least one sector is dynamically configurable (see page 3, lines 25 – 30). Wright et al. does not disclose a network management server receiving communication data from a data source. However, Amin et al. teaches a data access system with a network management server receiving communication data from a data source and send data to customer premises equipment (see figure 2). Therefore it would be obvious to an ordinary skilled in the art at the time the invention was made to combine the teachings of Amin et al. in Wright et al.'s data accessing system to provide a distributed IP centric system and method for fireless access to internet protocol bases network (see page 1, lines 45 – 47).

Regarding claim 2, Amin et al. teach that the data source is internet (see figure 2).

Regarding claim 3, Wright et al teach that the transmission cell is segmented into plurality of sectors. Therefore subdividing into three sectors is a matter of design choice (see column 3, lines 31 – 49).

Regarding claim 4, Wright et al. teach that each of the sectors is dynamically configurable (see column 4, lines 20 – 32).

Regarding claim 6, which inherits the limitations of claim 1, Wright et al further teach transmission cell periodically polls said at least one CPE to retrieve the SNR (see column 4, lines 61 –66).

Regarding claim 11, claimed apparatus including the features corresponding to subject matter mentioned above in rejection 1 is applicable hereto.

Regarding claim 12, which inherits the limitations of claim 11, Amin et al. teach that network management server adjust a bandwidth allocation to Customer Premises Equipment (see column 5, lines 50 – 53).

Regarding claim 13, which inherits the limitations of claim 11, Amin et al teach that the network management server configures the IP address for said CPE (see column 5, lines 53 – 57).

Regarding claim 14, which inherits the limitations of claim 11, Amin et al teach that said network management server interfaces with payment information linked to a CPE to determine access control for said CPE (see figure 2).

Regarding claim 15, which inherits the limitations of claim 11, Amin et al. teach that said network management server additionally provides management of transmission cell (see figure 2).

Regarding claim 16, which inherits the limitations of claim 15, Wright et al teach that transmission cell includes plurality of sectors and the network management server alters the frequency of operation of at east one sector (see column 4, line 20 – 33).

Regarding claim 17, which inherits the limitations of claim 15, Wright et al further teach that plurality of transmission cells having plurality of sectors (see figure 4) and

said network management server alters the frequency of operation of at least one sector of plurality of said transmission cells (see column 4, lines 33 – 44).

Claims 7 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (US Patent 6,108,523) in view of Amin et al. (US Patent 6,714,987) as applied to claim 6 above, and further in view of Walton et al (US Patent 6,751,187).

Regarding claim 7, which inherits the limitations of claim 6, the combination of Wright et al and Amin et al failed to disclose the SNRs of each CPE in a sector of said transmission cell are averaged and compared to a threshold to determine when the sector is affected by interference. However, Walton et al teach to select the channels using SNR of each channel averaged and compared to a threshold. Therefore it would be obvious to an ordinary skilled in the art at the time the invention was made to use the better channel to transmit data.

Regarding claim 8, which inherits the limitations of claim 7, Walton et al further teach said sector begins using a new frequency of operation in response to said threshold determination.

Regarding claim 9, which inherits the limitation of claim 8, Wright et al further teach said transmission cell is segmented into three sectors each sector operating at a different frequency, and wherein said new frequency of operation is part of predetermined revised frequency plan for said sectors in said transmission cell.

Regarding claim 10, which inherits the limitations of claim 9, Wright et al further teach plurality of transmission cells and wherein new frequency of operation is part of a predetermined revised frequency plan for plurality of said transmission cell.

Claims 18 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrigan et al. (US Patent 6,640,097) in view Mallinckrodt (US Patent 6,108,561).

Regarding claim 18, Corrigan et al. teach a self- provisioning data access system self-provisioning to establish communication with data access system at initial activation (see column 4, lines 49 – 52). Corrigan failed to teach a wireless transceiver receiving a spread spectrum signal from a transmission cell of a data access system and transmitting a spread spectrum encoded data signal to transmission cell of a data access system, a power amplifier performing automatic gain control to control the amplitude of said signal transmitted to said transmission signal. However, Mallinckrodt teach a wireless transceiver receiving a spread spectrum signal from a transmission cell of a data access system and transmitting a spread spectrum encoded data signal to transmission cell of a data access system (see abstract), a power amplifier performing automatic gain control to control the amplitude of said signal transmitted to said transmission signal (see figure 7 component 128 and 188) and said CPE determines the signal to noise ratio of received signal (see abstract). Therefore it would be obvious to an ordinary skilled in the art at the time the invention was made, so that the receiver to determine the quality of the received signal and provides a local quality signal to its associated transmitter in the respective transceiver indicative of that received signal quality (see column 3, lines 63 – 66).

Regarding claim 19, which inherits the limitations of claim 18, Corrigan et al. teach the CPE in remote communication with a network management device and said network management device manages CPE (see figure 2).

Regarding claim 20, which inherits the limitations of claim 18, Corrigan et al. teach that transmission cell includes a plurality of sectors and wherein said CPE identifies which sector it occupies during self-provisioning (see column 5, lines 41- 44).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison Joseph whose telephone number is (571) 272-6041. The examiner can normally be reached on M-F 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jaison Joseph
02/24/2006



DAC:HA
PRIMARY EXAMINER